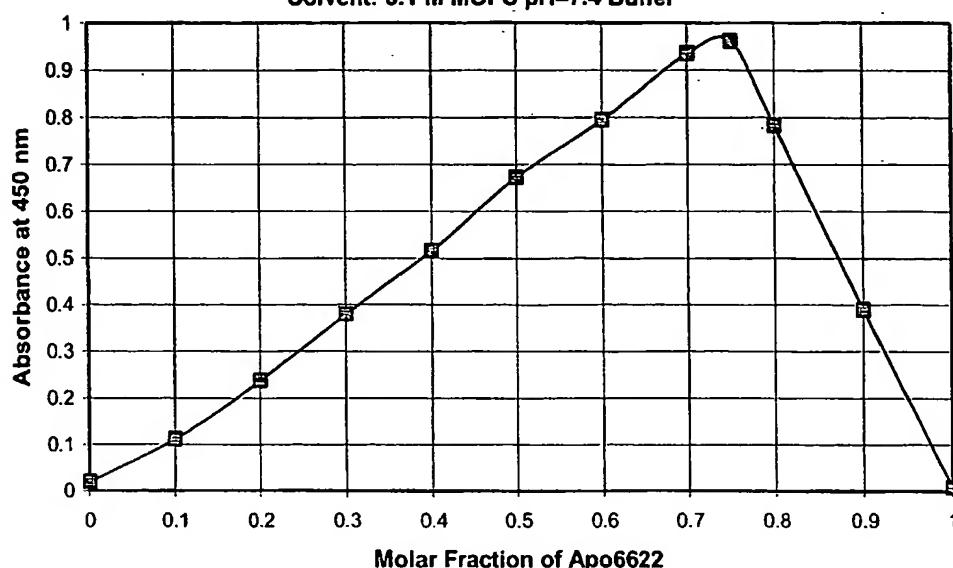


1/6

Figure 1: Job's Plot for Apo6622 $[\text{Fe}^{3+}]_{\text{total}} + [\text{Apo6622}]_{\text{total}} = \text{Constant} = 8 \times 10^{-4} \text{ M}$

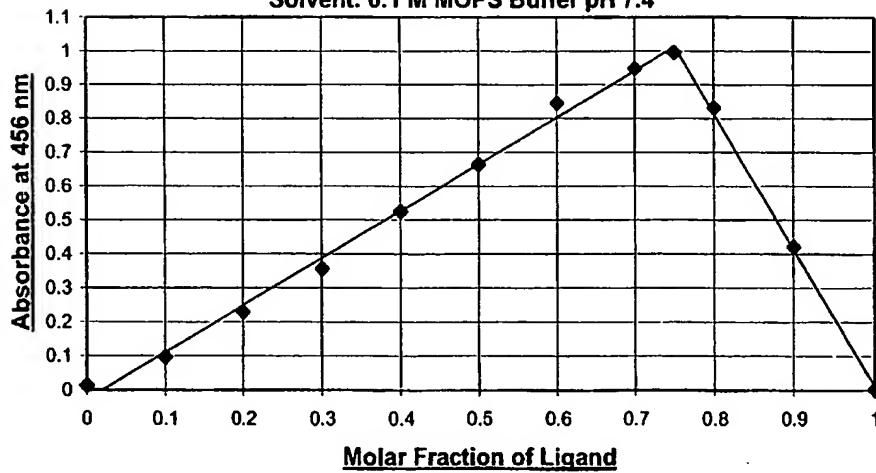
Solvent: 0.1 M MOPS pH=7.4 Buffer



5

Figure 2: Job's Plot for Apo6617 $[\text{Fe}^{3+}]_{\text{total}} + [\text{Apo6617}]_{\text{total}} = 8 \times 10^{-4} \text{ M}$

Solvent: 0.1 M MOPS Buffer pH 7.4



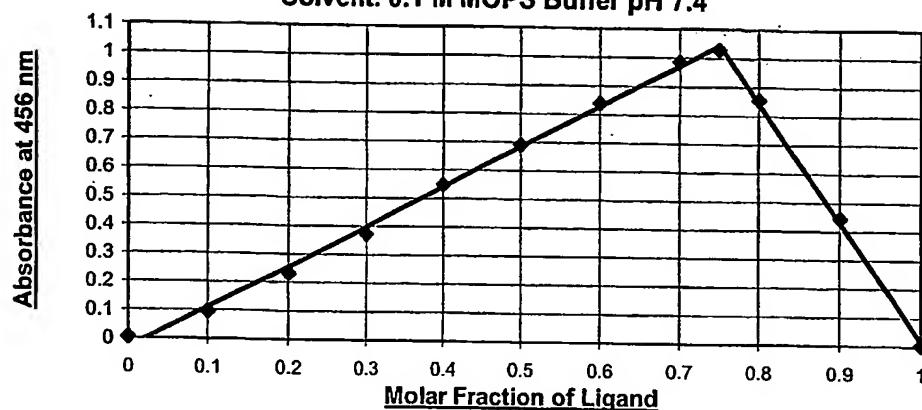
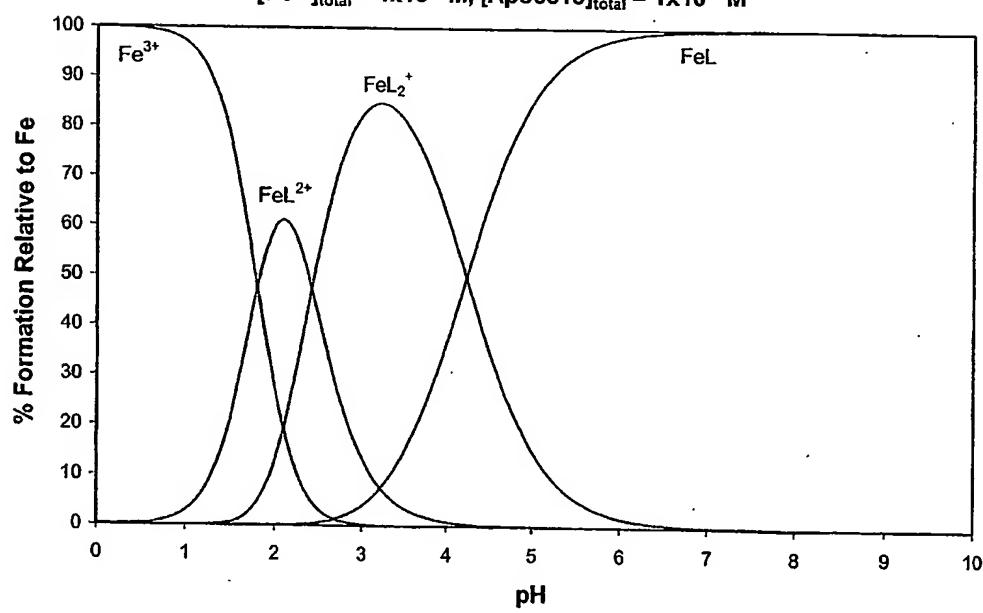
10

2/6

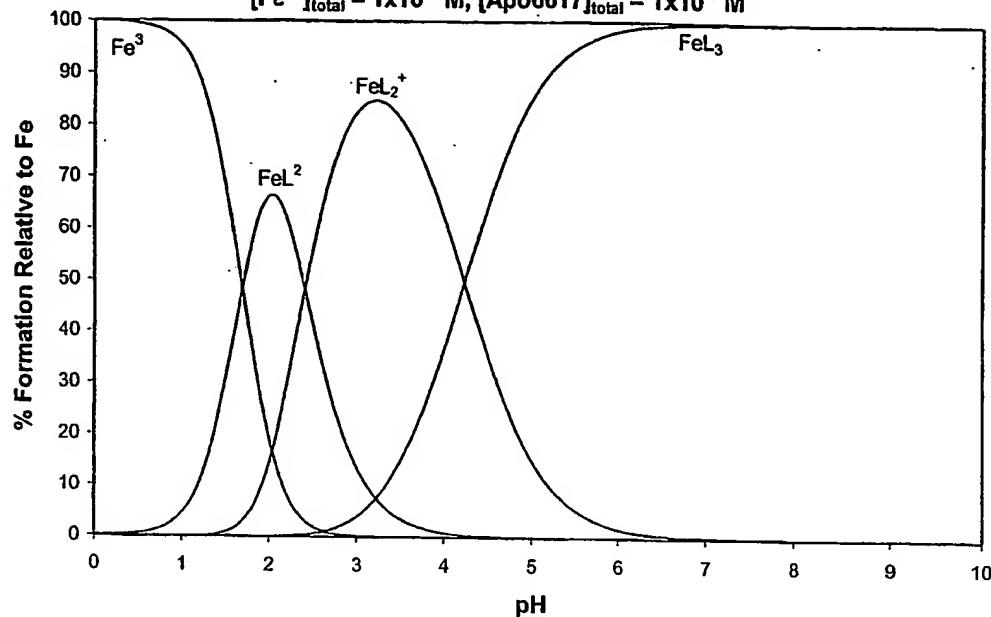
5

Figure 3: Job's Plot for Apo6619 $[Fe^{3+}]_{total} + [Apo6619]_{total} = 8 \times 10^{-4}$

Solvent: 0.1 M MOPS Buffer pH 7.4

**Figure 4: Speciation Plot for Fe^{3+} -Apo6619** $[Fe^{3+}]_{total} = 1 \times 10^{-6} M$, $[Apo6619]_{total} = 1 \times 10^{-5} M$ 

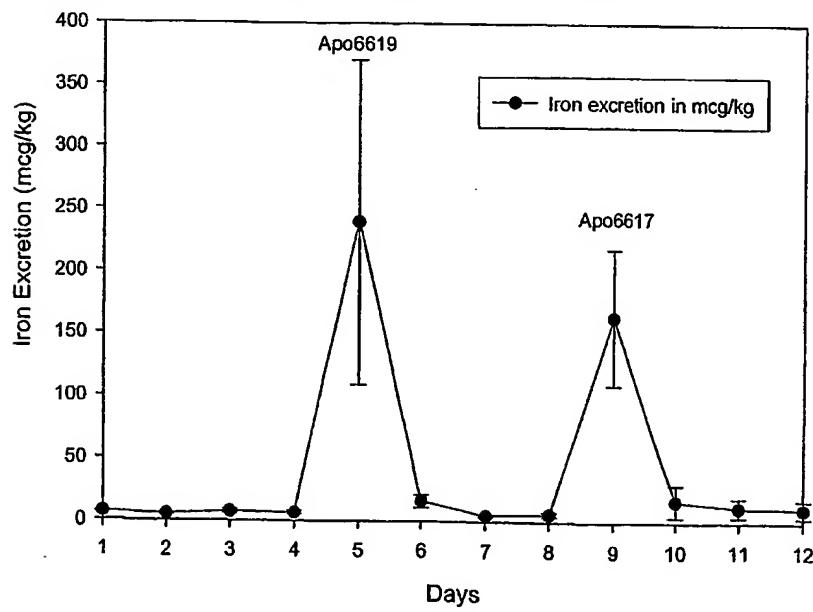
3/6

Figure 5: Speciation Plot for Fe^{3+} -Apo6617 $[\text{Fe}^{3+}]_{\text{total}} = 1 \times 10^{-6} \text{ M}, [\text{Apo6617}]_{\text{total}} = 1 \times 10^{-5} \text{ M}$ 

5

Figure 6

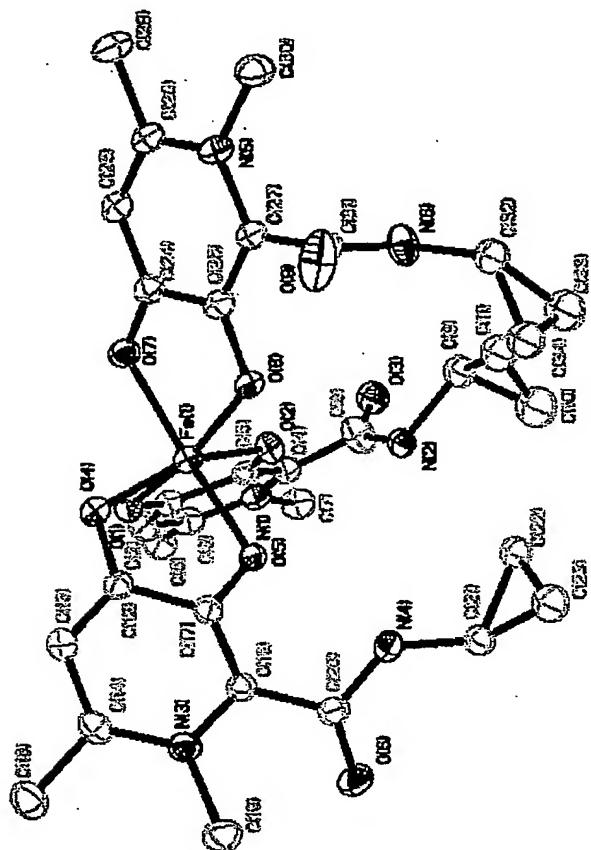
Effectiveness of Apo6619 and Apo6617 in Promoting Urinary Iron Excretion



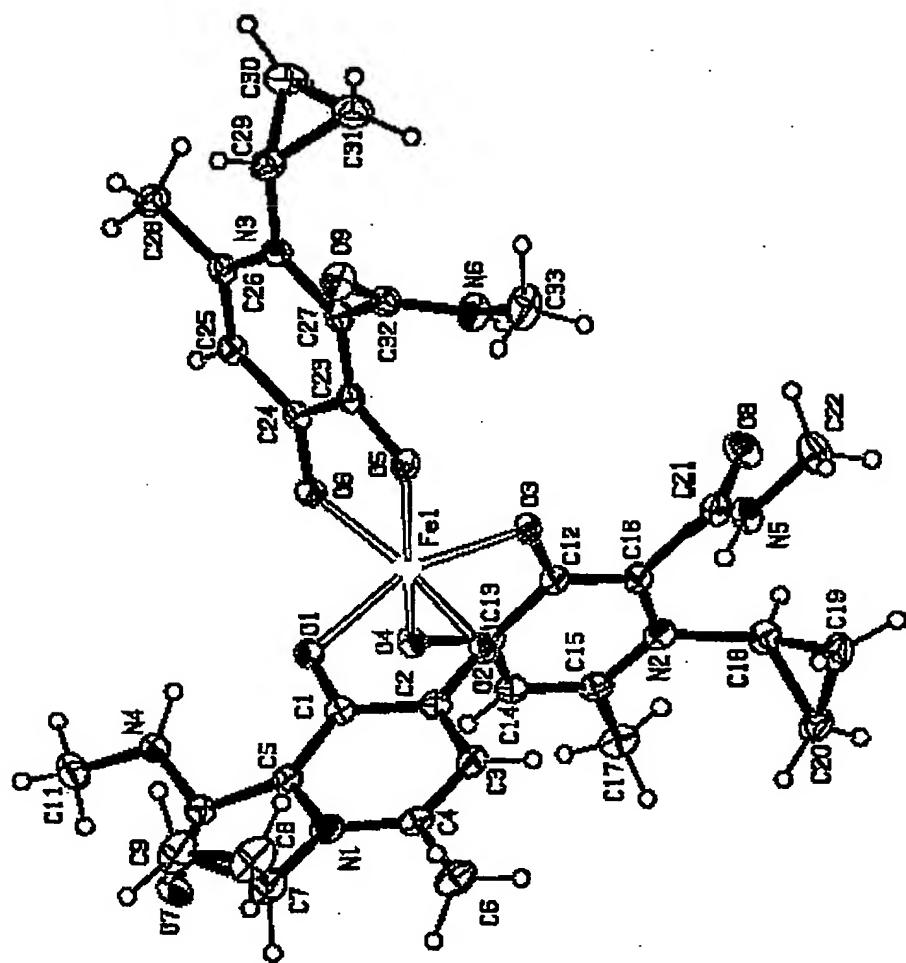
4/6

5 **Figure 7**

The crystal structure of Fe(Apo6617)₃.

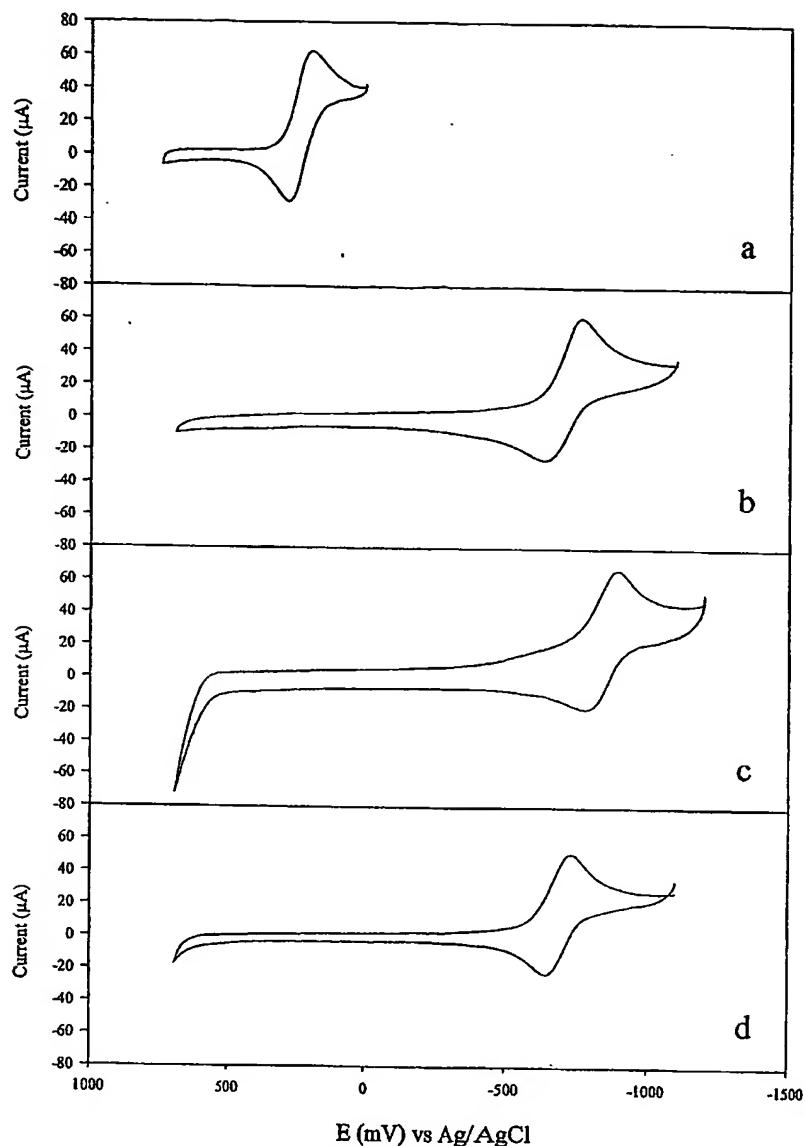


BEST AVAILABLE COPY

FIG. 8 Single Crystal Structure of Fe(Apo6619)₃ chelate

BEST AVAILABLE COPY

6/6



5

FIG. 9 Cyclic voltammogram of a. K₃Fe(CN)₆; b. Fe(DFO); c. Fe(deferiprone); d. Fe(Apo6619)₃ at pH 7.4. K₃Fe(CN)₆ is used as an standard to validate the results.

10

BEST AVAILABLE COPY